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ABSTRACT

An instructor's manual and student activity guide on fiber and fabric identification are provided in this set of prevocational education materials which focuses on the vocational area of distributive education (fashion merchandising). (This set of materials is one of ninety-two prevocational education sets arranged around a cluster of seven vocational offerings: agriculture, home economics, distributive education, health occupations, world of work, trade and industry, and office occupations.) The instructor's guide is organized into the following elements: title of activity, duration of activity (four to twelve periods), activity goals, seven instructional objectives, related vocational clusters, and activity implementation (description, materials needed, safety considerations, teacher preparation prior to class, during the class, follow-up activities, answer key to student check point activities, and masters for duplication [e.g., activity sheets and checkpoints 1-3]). The student activity guide provides step-by-step instructions (narrative and illustrations) for completing each instructional objective (identify and chart the three basic weaves, identify fabric samples using the burn test, weave a piece of fabric using a hand loom) At the end of each set of instructions is a student check point (evaluation activity). Occupational descriptions for a salesperson, buyer, and clothes designer conclude the document. (JH)

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ED169335

D.E-FASHION MERCHANDISING
FIBER AND FABRIC IDENTIFICATION

Kit No. 46

INSTRUCTOR'S MANUAL

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1978

CE 020 520

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TITLE OF ACTIVITY

Kit No. 46 – D.E. – Fashion Merchandising, Fiber and Fabric Identification

DURATION

Main Activity – 3 to 4 periods
Follow-up Activity – 1 to 8 periods

GOALS

The student will learn how to use a pick glass to record the thread count of a fabric sample.

The student will be able to produce in chart form a diagram for plain-weave, twill-weave, and satin-weave fabric.

The student will learn how to operate a simple frame loom and how to produce a piece of plain-weave fabric.

The student will learn how to identify fibers by conducting four simple tests.

INSTRUCTIONAL OBJECTIVES

The student will count the number of warp and filling threads in a piece of fabric using the pick glass.

The student will be able to identify and chart the three basic weaves: plain weave, twill weave, and satin weave, using a point paper diagram.

The student will weave a piece of plain-weave fabric using a hand loom.

The student will identify samples of linen and cotton fabric using the oil test.

The student will identify samples of linen and cotton fabric using the ink test.

The student will identify a sample of acetate fabric using the acetone test.

The student will identify fabric samples of cotton, wool, nylon, polyester, and fiber-glass using the burn test.

VOCATIONAL CLUSTERS

Home Economics
Office Occupations

ACTIVITY IMPLEMENTATION

A. Activity Description

This activity will introduce the student to the field of textiles as it relates to fashion merchandising. Using a pick glass, the student learns how to count and identify the basic weaves, after which the student will produce a piece of fabric using a small wooden loom. A series of four simple fiber identification tests completes the activity.

B. Safety

As a precautionary measure, a fire extinguisher has been included in the materials list. Read the instructions carefully and make sure you know how to handle the model in case it is needed.

Good room ventilation is a necessity when conducting the burn and the acetone tests. The air movement in the room should not blow the candle flame thereby increasing the danger of unwanted fire.

All traces of the acetone should be removed from the work station after completing that test. Acetone is highly flammable and extreme care should be taken to insure that the student's sample has been properly mounted on the Activity Sheet and that all drops or spills have been completely removed.

Before lighting the student's candle for the burn test, you must inspect the student's work area to insure that all books, papers, clothing, etc. have been removed. Also check the layout of the candle and fabric samples to insure that the student will not have to reach over the flame to get the samples. For a student that is left-handed, reverse the suggested layout.

Give verbal caution to the students concerning removal of any loose-fitting clothing such as scarves, sweaters, or jackets. Care should also be taken to avoid hair from coming in contact with the flame.

C. Material Required

1. Audio Visual Equipment
   Projection screen (if free film is ordered)
   16 mm film projector

2. Technical Equipment
   1 fire extinguisher
   25 pick glasses
   25 frame looms
   25 shuttles
   25 wide-toothed combs
   25 candle holders
   25 pairs of tweezers
   25 hot pads
3. Expendable Materials
   Glue (rubber cement)
   25 candles (4, 5, or 6 inch – 10.16, 12.70, or 15.24 cm)
   25 disposable cups (nut cup size)
   1 bottle acetone (fingernail polish remover)
   1 bottle oil
   1 bottle ink
   1 roll cotton cord (75 yards – 68.58 m)
   1 skein 3-ply yarn – 75 yards (68.58 m)
   ½ yard (.457 m) plain weave fabric
   ¼ yard (.228 m) twill weave fabric
   ¼ yard (.228 m) satin weave fabric
   ¾ yard (.685 m) cotton fabric
   ½ yard (.457 m) linen fabric
   ¼ yard (.228 m) acetate fabric
   ¼ yard (.228 m) wool fabric
   ¼ yard (.228 m) nylon fabric
   ¼ yard (.228 m) polyester fabric
   ¼ yard (.228 m) fiberglass
   matches or lighter

D. Preparation Prior to Class

If you are not familiar with this activity, you should read through the student activity guide to become acquainted with the tasks involved.

Tables or counter tops should be used for this activity. Slant-top desks will allow the materials to slide, thus increasing the risk of fire.

Twenty-five fabric swatches, two inches square (5.08 cm), should be cut from each piece of material. Each swatch should be identified by stapling the proper number to the swatch. (A student could assist in carrying this out).

The swatches should be identified as follows:

No. 1 – plain weave
No. 2 – plain weave
No. 3 – twill weave
No. 4 – satin weave
No. 5 – cotton
No. 6 – linen
No. 7 – cotton
No. 8 – linen
No. 9 – acetate
No. 10 – cotton
No. 11 – wool
No. 12 – nylon
No. 13 – polyester
No. 14 – fiberglass

The cotton cord and the 3-ply yarn should be cut into 3-yard (2.74 m) lengths.

At each station place the following items:

Student Activity Guide
Pick glass
Glue
Frame loom
Shuttle
3 yards (2.74 m) of cotton cord
3 yards (2.74 m) of 3-ply yarn
Comb
Candle holder
Hot pad
Tweezers
Candle
14 swatches of fabric
Activity Sheet 1
Activity Sheet 2
Activity Sheet 3
Activity Sheet 4

At the instructor's desk, place the following items:

Handout sheets (Checkpoint 1, 2, 3)
Oil
Ink
Acetone in cups (do not pour until the student is ready to use it)
Matches
Fire extinguisher

E. During Class Session

INTRODUCTION – Textiles are a very important part of the fashion industry. In fact, if it were not for the textile industry, there would not be a fashion industry. An understanding and appreciation of the complexities of fibers and fabrics and how they relate to fashion is the reason for this activity. You will gain an understanding of some simple aspects of a very complex business.

On your desk you have the equipment

and materials needed to explore one part of the fashion business.

Follow the directions in the student guide. When you need a checkpoint or other material, go to the instructor's desk.

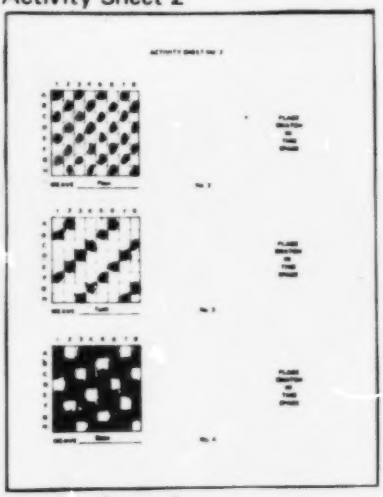
F. Follow-up Activities

1. Using the VIEW Fact Sheet, students should report on at least one of the following occupations:
   - Buyer
   - Department Store Salesperson
   - Fashion Model
   - Furniture Salesperson
   - Garment Inspector
   - Department Store Manager
   - Seamstress
   - Weaver
2. Look up ads in the newspaper pertaining to fashion careers.
3. Take a field trip to a textile plant.
4. Take a field trip to a clothing manufacturing plant.
5. Visit a fabric store or department store in your area. Make a list of the different fabrics they sell and how they are used.
6. Get swatches of fabrics and make a textile notebook identifying the weave, fiber, content, uses, and care of each.
7. Invite a local craftsperson to demonstrate weaving or knitting.
8. Visit a local crafts fair.
9. Have students experiment with natural dyes on white swatches of fabric. Test for colorfastness in hot and cold water.
10. Set up an in-school display showing different fabrics and their uses.
11. Let students use looms and make twill-weave, satin-weave, and basket-weave fabrics.
12. Let the students create their own designs for fabrics.
13. Test samples of fabric for colorfastness to light by covering half a piece of fabric with opaque paper. Expose the other half to outdoor light for two weeks. Compare the halves.
14. Launder a sample of colored fabric and compare it with the original fabric that has not been laundered.
15. Make a design suitable for a dress fabric. Transfer this design to a potato. Put this on a plain piece of fabric.
16. Check the water-repellency of fabrics marked **water repellent, water resistant,** and **waterproof.**
17. Test samples of fabrics for fastness to perspiration. Soak each sample in a weak acetic acid solution for 10 minutes. Roll it in a piece of undyed cloth and permit it to dry gradually (overnight). Check for dye on the undyed cloth.

ANSWER KEY

Activity Sheet 1
(To be done by instructor)

Activity Sheet 2



Activity Sheet 3
- Fabric sample 5 – cotton
- Fabric sample 6 – linen
- Fabric sample 7 – cotton
- Fabric sample 8 – linen
- Fabric sample 9 – acetate

Activity Sheet 4
- Cotton – fabric swatch 10
- Wool – fabric swatch 11
- Nylon – fabric swatch 12
- Polyester – fabric swatch 13
- Fiberglass – fabric swatch 14

Checkpoint 1

a. 15
b. 15
c. 225
d. 450

Checkpoint 2

1. satin
2. plain
3. twill

Checkpoint 3

Fabric sample 10 – cotton
Fabric sample 11 – wool
Fabric sample 12 – nylon
Fabric sample 13 – polyester
Fabric sample 14 – fiberglass

MASTERS FOR DUPLICATION

VIEW Fact Sheet
Activity Sheet 1
Activity Sheet 2
Activity Sheet 3
Activity Sheet 4
Checkpoint 1
Checkpoint 2
Checkpoint 3

VIEW FACT SHEET

NAME _____ CLASS _____ OCCUPATION _____

A. List the advantages (good points) of this occupation (job).

B. List the disadvantages (bad points) of this occupation (job).

C. List three things you should know to do this occupation (job).
1.
2.
3.

D. What type of education should you get to be prepared (do) for this occupation (job)?

E. What courses must you take to go into this occupation (job)?

F. What do you think your future in this occupation (job) will be?

G. What wage can you expect in this occupation (job)?

H. What are the working hours of this occupation (job)?

I. To learn more about this occupation (job), write to:

J. Using a scale of 1 to 5, circle the number that measures your interest in this occupation (job) as a possible career.

I don't like it. 1 2 3 4 5 I like it.

ACTIVITY SHEET NO. 1

Count of cloth record sheet.

1. _____ **Number of warps (lengthwise yarns)**

2. _____ **Number of fillings (crosswise yarns)**

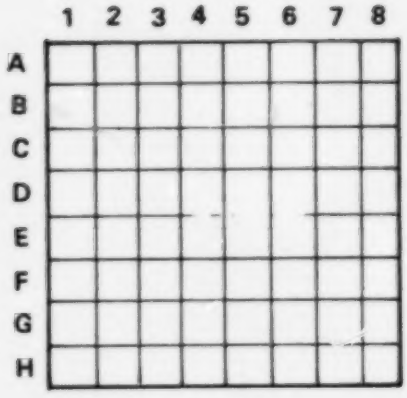
3. a._____ x b._____ = c._____ x 2 = d._____
Count of Cloth

The opening in the pick glass is ½ inch (1.27 cm). Therefore, your answer must be multiplied by two in order for the number of warps and fillings to be per square inch.

Count is expressed in the following manner – 112 x 84. The warp (112) is always written first, followed by the fillings (84). Since there are usually more warps than fillings in cloth, the larger number is generally the warp. The letter "x" stands for the word "by" and the above count would be read "112 warps by 84 fillings."

PLACE SWATCH IN THIS SPACE

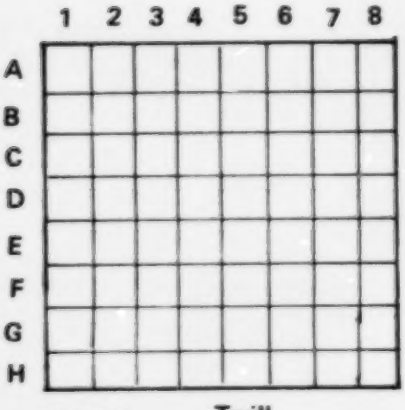
ACTIVITY SHEET NO. 2



WEAVE Plain

No. 2

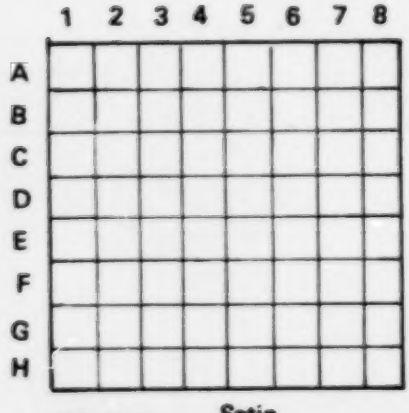
PLACE SWATCH IN THIS SPACE



WEAVE Twill

No. 3

PLACE SWATCH IN THIS SPACE



WEAVE Satin

No. 4

PLACE SWATCH IN THIS SPACE

ACTIVITY SHEET NO. 3

Fabric sample No 5

_____(name)

Fabric sample No. 6

_____(name)

Fabric sample No. 7

_____(name)

Fabric sample No. 8

_____ (name)

Fabric sample No. 9

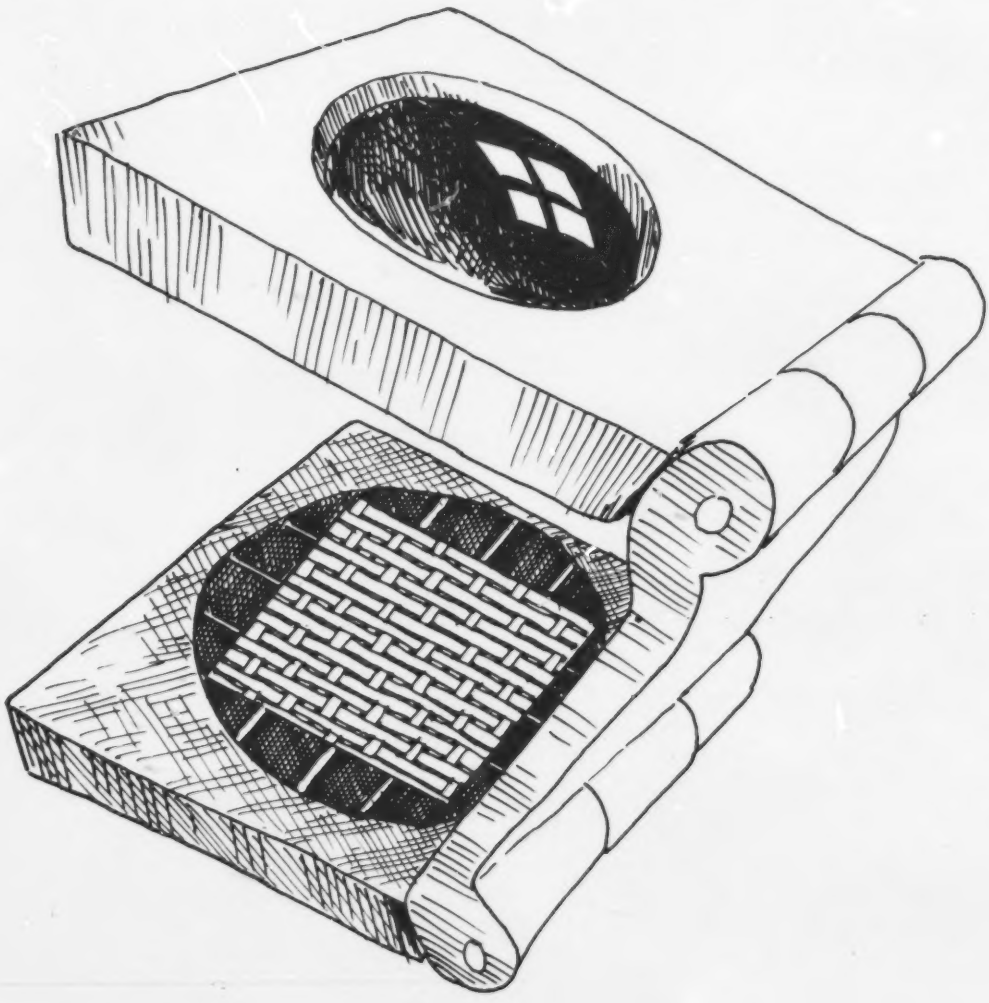
_____ (name)

ACTIVITY SHEET NO. 4

BURNING TEST CHART FOR FIBER IDENTIFICATION

FABRIC SWATCH NO.	FIBER	FLAME	ODOR	RESIDUE
	Cotton	Ignites and burns with orange-yellow flame	Burning paper	Grey ash
	Wool	Burns slowly with small sizzling flame. Usually self-extinguishing	Burning hair	Crisp, irregular, crushable black bead
	Nylon	Shrinks from heat, melts; burns with difficulty	Odor of celery	Hard, round, fawn-colored, or grey bead
	Polyester	Fuses and shrinks from flame; burns slowly with melting; self-extinguishing	Heavy, pungent odor	Hard round beige bead
	Fiberglass	Melts; Cannot burn	Chemical	Hard, round dark bead

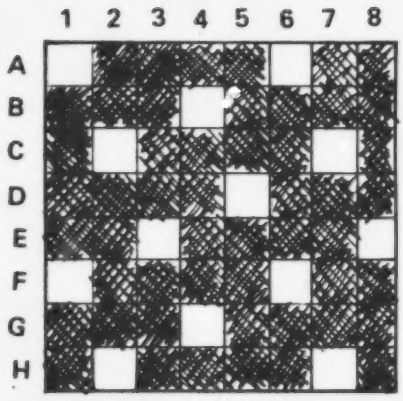
CHECKPOINT NO. 1



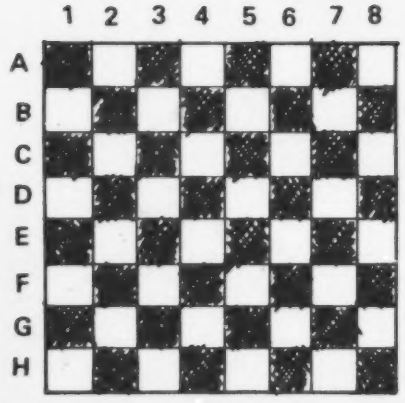
(a) _____ x (b) _____ = (c) _____ x 2 = (d) _____

Warps Fillings Count of Cloth

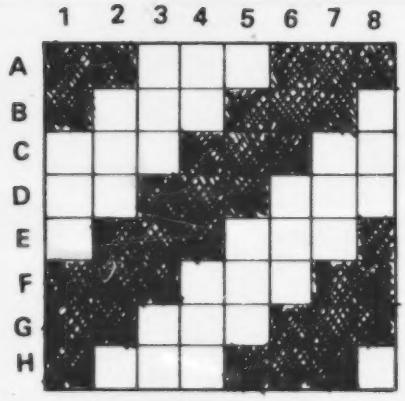
CHECKPOINT NO. 2



No. 1 _____ weave



No. 2 _____ weave



No. 3 _____ weave

14

CHECKPOINT NO. 3

Fabric sample No. 10

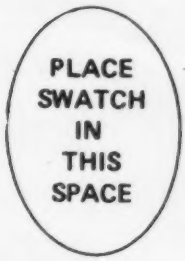
_____(name)

Fabric sample No. 11

_____(name)

Fabric sample No. 12

_____(name)



Fabric sample No. 13

_____(name)

Fabric sample No. 14

_____(name)

D.E-FASHION MERCHANDISING
FIBER AND FABRIC IDENTIFICATION

Kit No. 46

STUDENT
LEARNING ACTIVITY GUIDE

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In Cooperation With

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Clemson University
Clemson, South Carolina 29631

1978

FASHION MERCHANDISING – FIBER AND FABRIC IDENTIFICATION

INTRODUCTION

In order for students to be successful in the field of fashion merchandising, they must have some knowledge of textiles. The basic raw material of fashion is the fabric of which these goods are made. There are many fabrics on the market today and more are being developed daily. Selling fashion items is a very big and exciting business. One must stay informed of the rapidly changing wants and needs of the consumer. Basic information about fashion is a must, and keeping abreast of current trends in fibers and fabrics is vital.

In this activity you will learn about fabrics and fibers. You will also perform some simple non-technical tests used in fabric identification.

GOALS

The student will learn how to use a pick glass to record the thread count of a fabric sample.

The student will be able to produce in chart form a diagram for plain-weave, twill-weave, and satin-weave fabric.

The student will learn how to operate a simple frame loom and will produce a piece of plain-weave fabric.

The student will learn how to identify fibers by conducting four simple tests.

DIRECTIONS

Start by reading Instructional Objective I and then follow the steps to complete the objective.

Complete each checkpoint before going on to the next objective.

If you cannot complete the checkpoint, redo the steps and try again before asking for help.

Do not make any marks in the programmed text.

MATERIAL

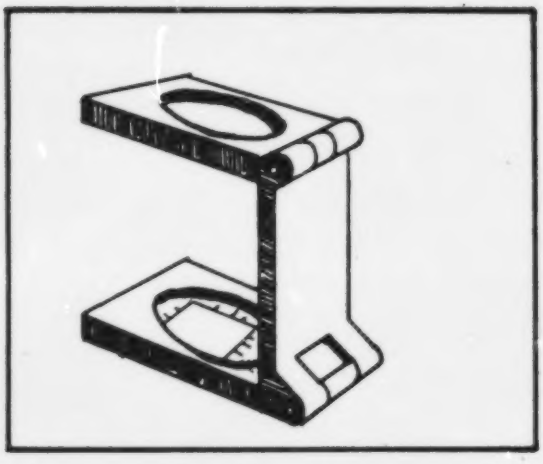
At your station you should have the following items:

Student Learning Activity Guide
Pick glass
Glue (rubber cement)
Frame loom
Shuttle
3 yards (2.74 m) of cotton cord
3 yards (2.74 m) of 3-ply yarn
Comb
Candle holder
Hot pad
Tweezers
1 candle
14 swatches of fabric
Activity Sheets 1, 2, 3, and 4

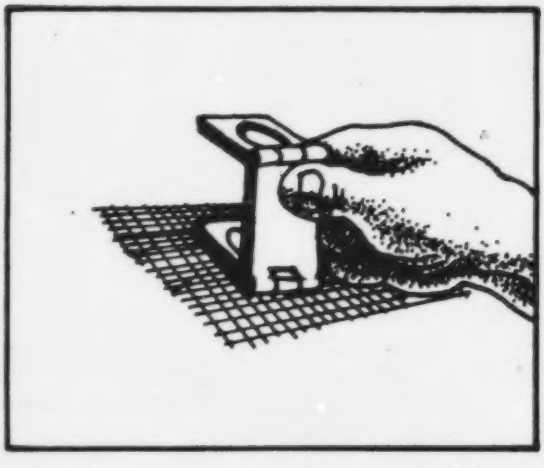
PROGRAMMED TEXT

Instructional Objective 1

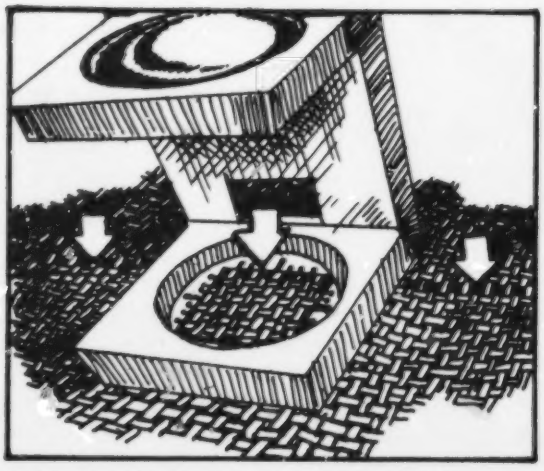
The student will count the number of warp and filling threads in a piece of fabric using the pick glass.



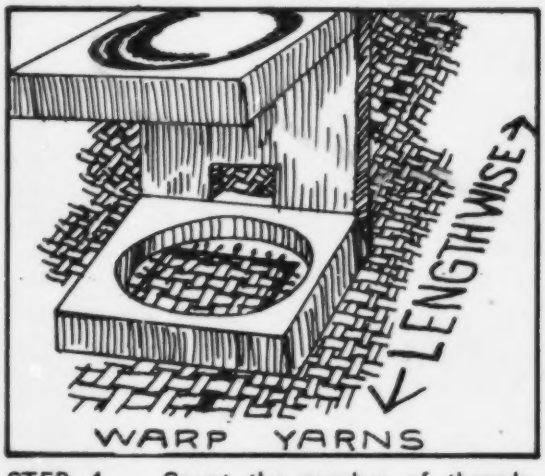
STEP 1 – Place the pick glass in front of you in the same position as shown in the picture.



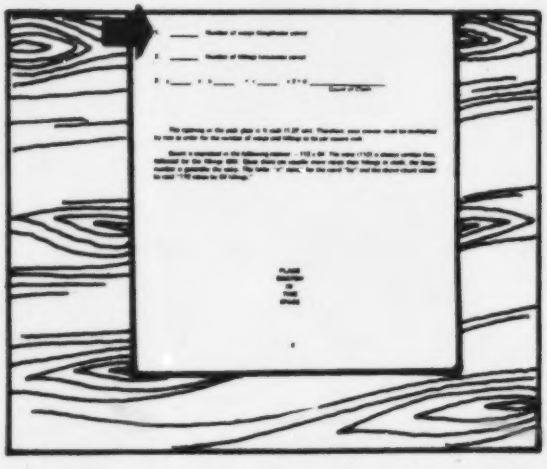
STEP 2 – Place the pick glass over the fabric swatch marked No. 1 in the same position.



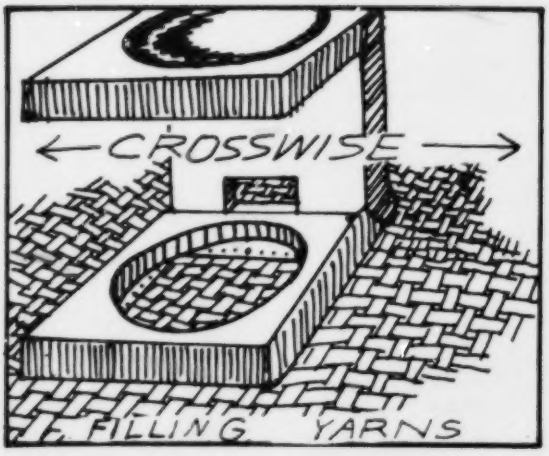
STEP 3 – Look through the magnifying glass and line the edge of the bottom square opening parallel to a crosswise yarn.



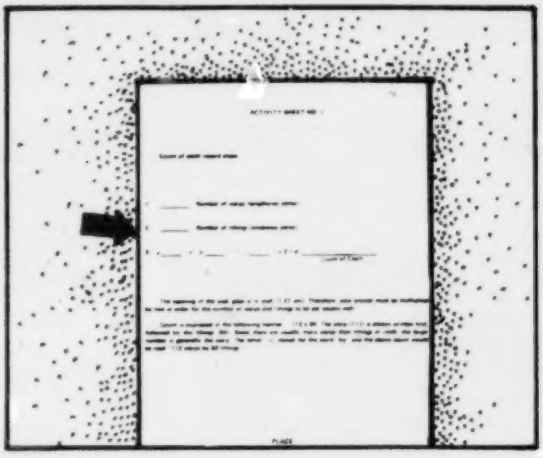
STEP 4 – Count the number of threads lengthwise (warps) inside the pick glass.



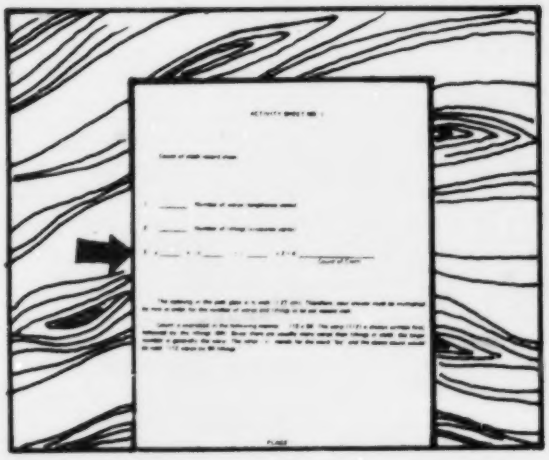
STEP 5 – Record the number of warps on Activity Sheet 1 in the space marked No. 1.



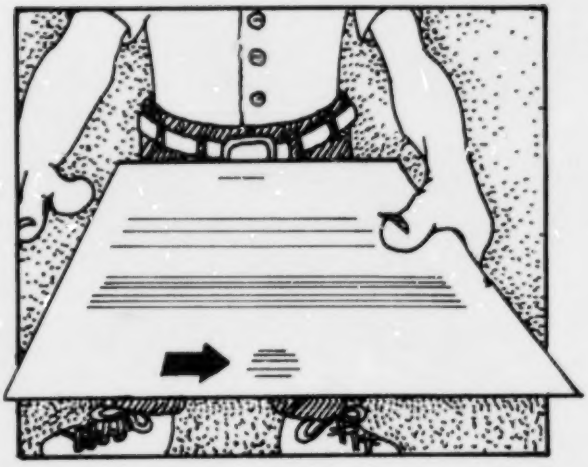
STEP 6 – Count the number of threads crosswise (fillings) inside the pick glass.



STEP 7 – Record the number of fillings on Activity Sheet 1 in the space marked No. 2.



STEP 8 – Complete No. 3 on the Activity Sheet using the information in No. 1 and No. 2.



STEP 9 – Glue the swatch of fabric marked No. 1 in the space provided on Activity Sheet 1.

Check Point

Get the sheet marked Checkpoint 1 from your instructor.

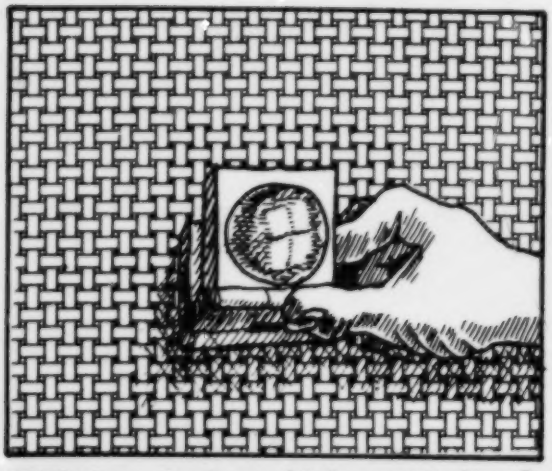
Without looking at the programmed text, count the number of warps and fillings. Record your answers in the proper place and complete the computations.

Go back to your instructor and ask to see the master to check your answers. Ask the instructor to check your Activity Sheet 1.

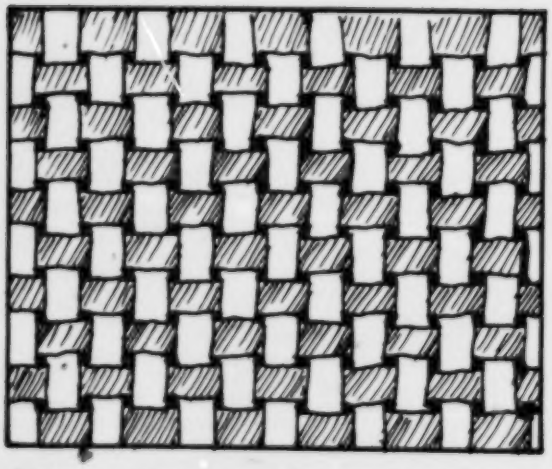
If your answers are correct, go on to the next objective. If they are wrong, redo the steps and the checkpoint.

Instructional Objective 11

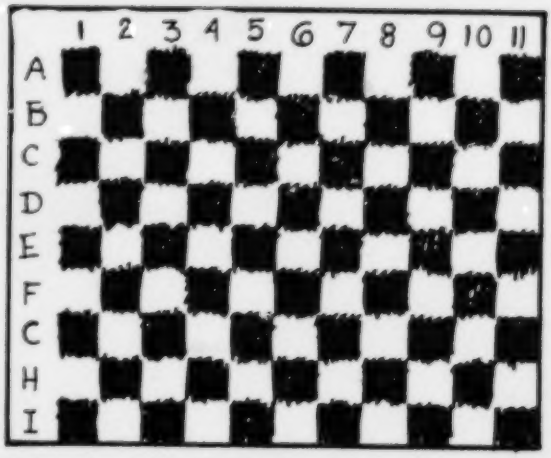
The student will be able to identify and chart the three basic weaves: plain, twill, and satin.



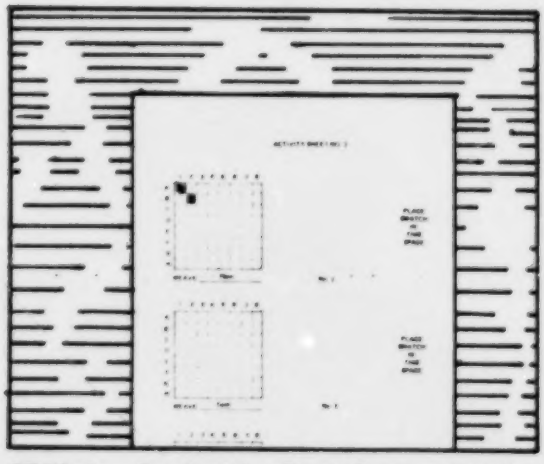
STEP 1 — Look at fabric swatch No. 2 through the pick glass.



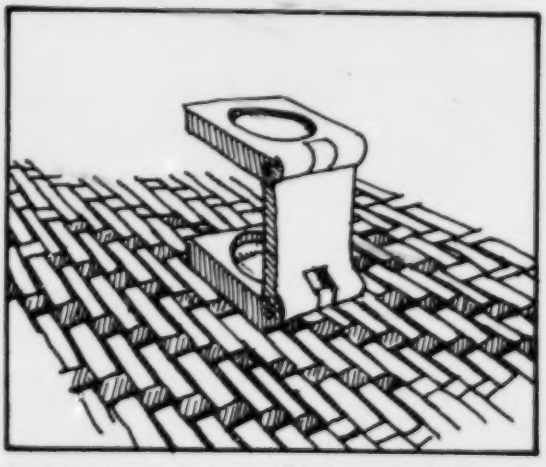
STEP 2 — Notice how the weave is similar to the one in the illustration.



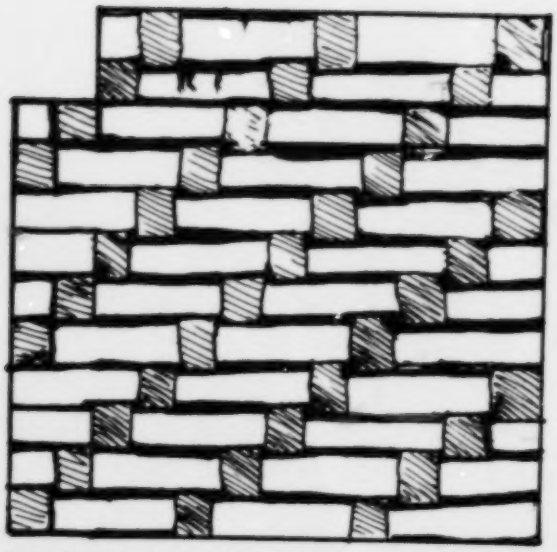
STEP 3 — This chart illustrates a plain weave. On row A of the weave, yarns 1, 3, 5, and 7 were raised, yarns 2, 4, 6, and 8 were lowered.



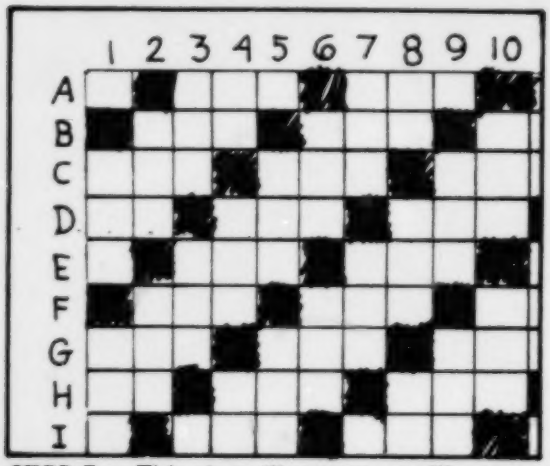
STEP 4 — On Activity Sheet 2, complete the point paper design illustrating plain weave.



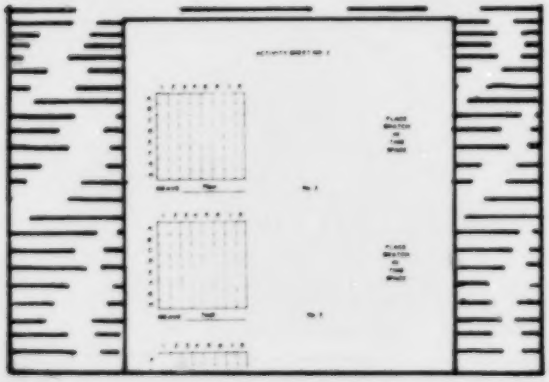
STEP 5 — Look at fabric swatch No. 3 through the pick glass.



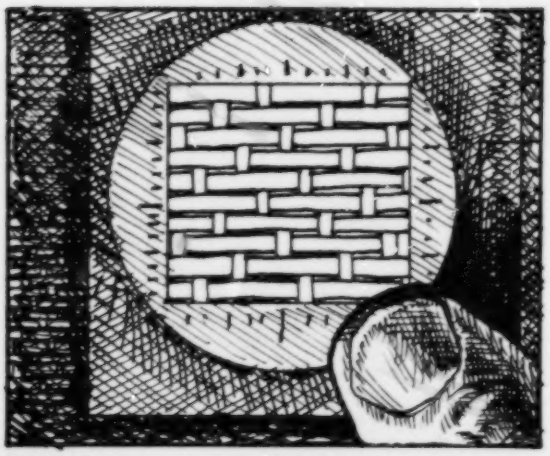
STEP 6 – Notice how the weave is similar to the one in the illustration.



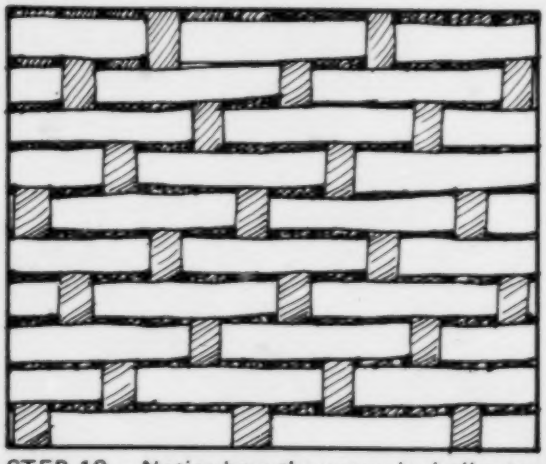
STEP 7 – This chart illustrates a twill weave. The interfacing of yarns in the twill weave produces diagonal lines on the face of the cloth.



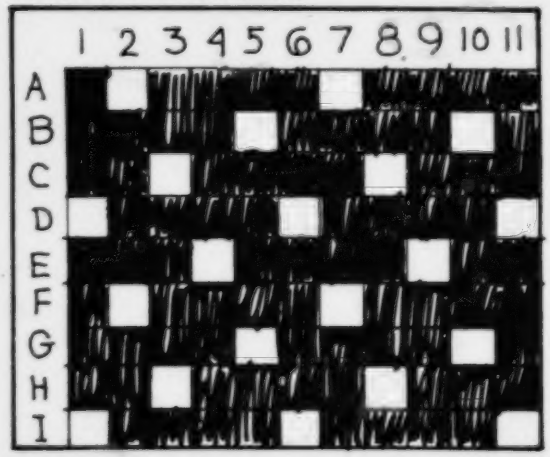
STEP 8 – On Activity Sheet 2, complete the point paper design illustrating twill weave.



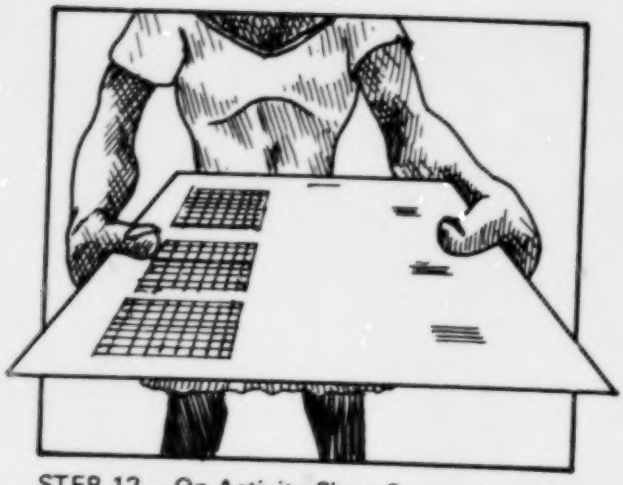
STEP 9 – Look at swatch No. 4 through the pick glass.



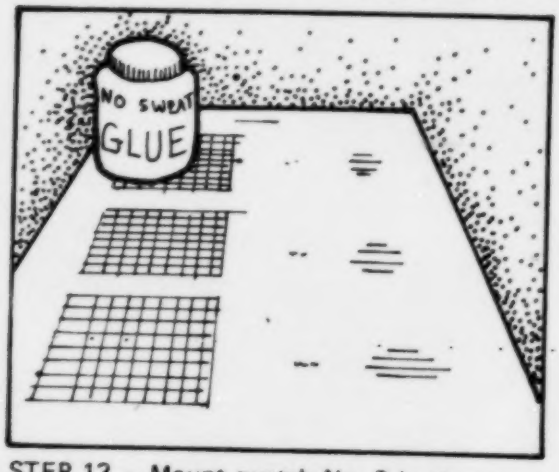
STEP 10 – Notice how the weave is similar to the one in the illustration.



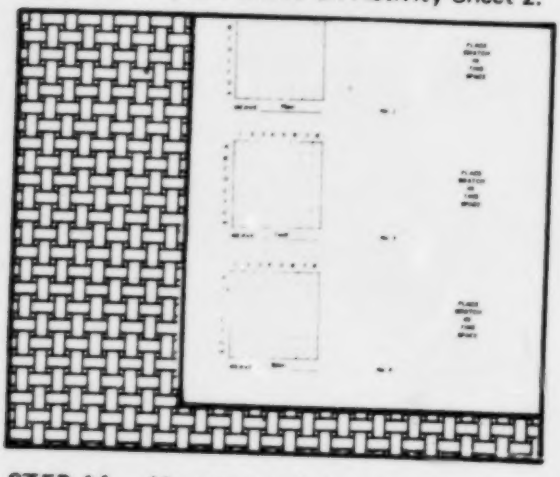
STEP 11 – This chart illustrates a satin weave. When the warp floats over a series of fillings (at least four) the fabric is called satin.



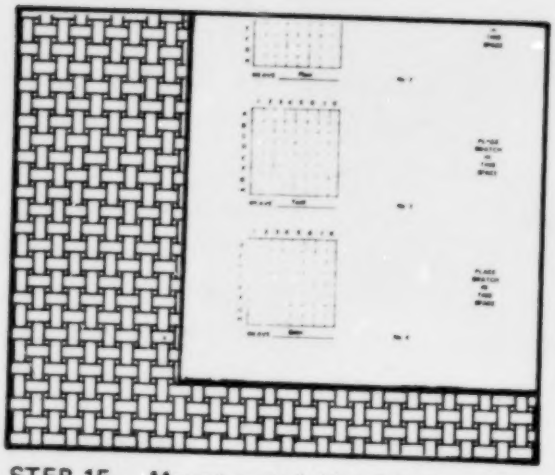
STEP 12 – On Activity Sheet 2, complete the point paper design illustrating satin weave.



STEP 13 – Mount swatch No. 2 in the space provided for plain weave on Activity Sheet 2.



STEP 14 – Mount swatch No. 3 in the space marked twill weave on Activity Sheet 2.



STEP 15 – Mount swatch No. 4 in the space provided for satin weave on Activity Sheet 2.

Check Point

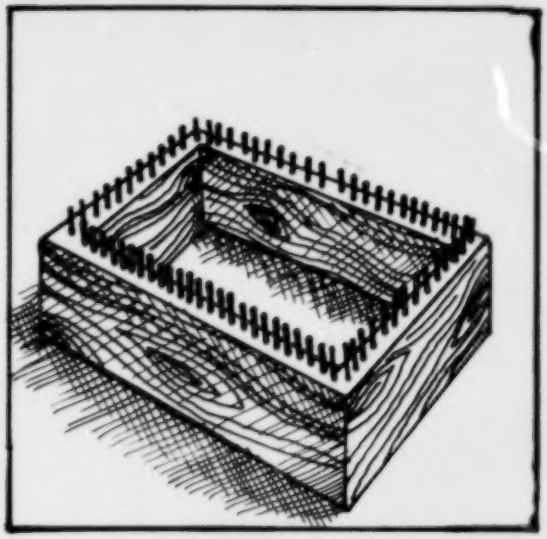
Get the sheet marked Checkpoint 2 for Objective II from your instructor.

Without looking at the programmed text, identify the three weaves. Go back to your instructor and ask to see the master to check your answers.

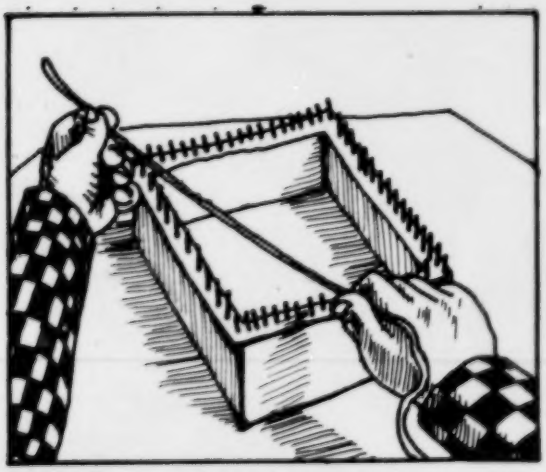
If your answers are correct, go on to the next objective. If they are wrong, redo the steps and the checkpoint.

Instructional Objective III

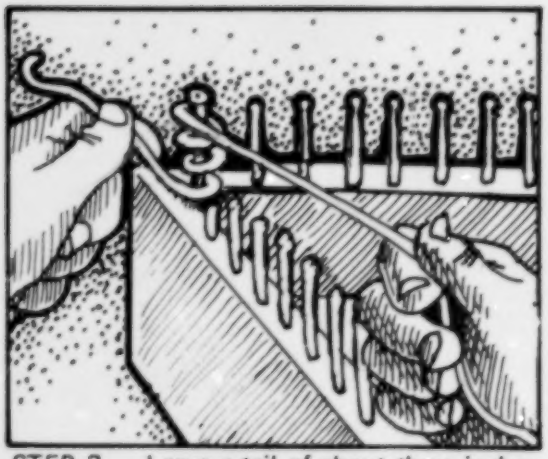
The student will weave a piece of plain fabric using a hand loom.



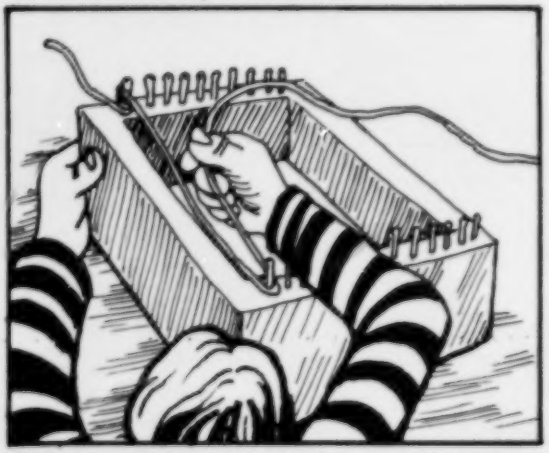
STEP 1 – Place the wooden frame loom in front of you in the same position as shown in this illustration.



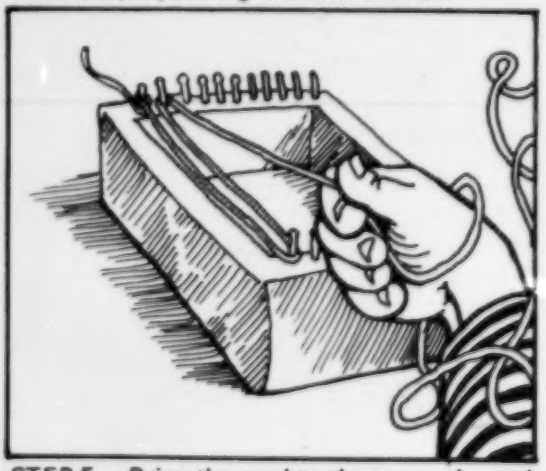
STEP 2 – Take the length of cotton cord in your hand and start at the upper left corner; put it in position as shown.



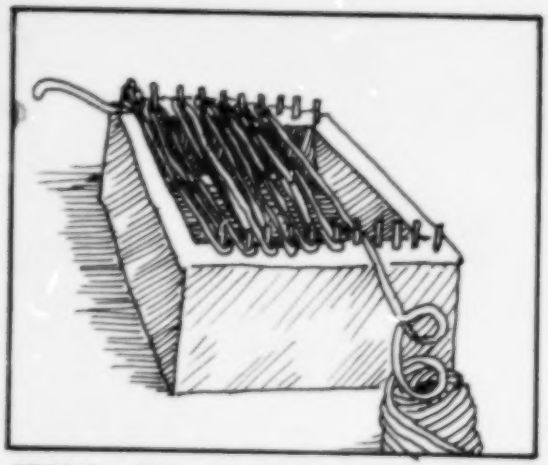
STEP 3 – Leave a tail of about three inches (7.62 cm) and wind the cord around the first nail across the top three times.



STEP 4 – Bring the cord down to the bottom of the loom and draw it around the first nail on the bottom of the loom. Keep the cord straight and go around to the left of the first nail and up by the right side of the nail.



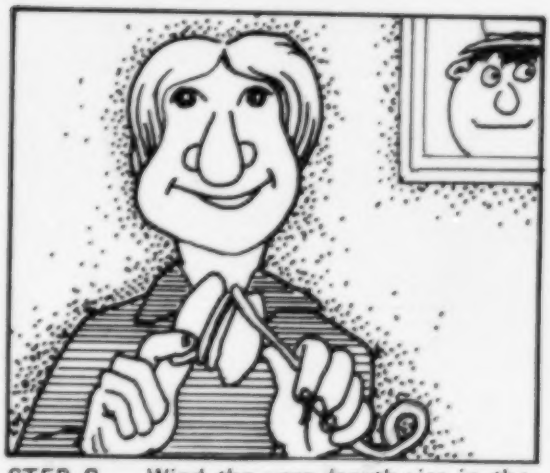
STEP 5 – Bring the cord to the top again, and run it around nail No. 2.



STEP 6 – Return the cord to the bottom and run it around nail No. 2; continue to repeat these steps, pulling the yarn evenly and using each nail in turn.

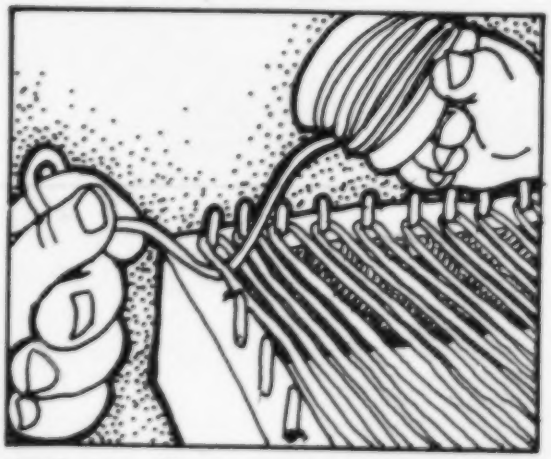
STEP 7 – Continue winding until all of the nails at the top and bottom are circled. Finish the last nail by circling it three times and leaving a tail.

STEP 8 – Take the plastic shuttle and the length of three-ply yarn in your hands – yarn in left hand and shuttle in the right hand.

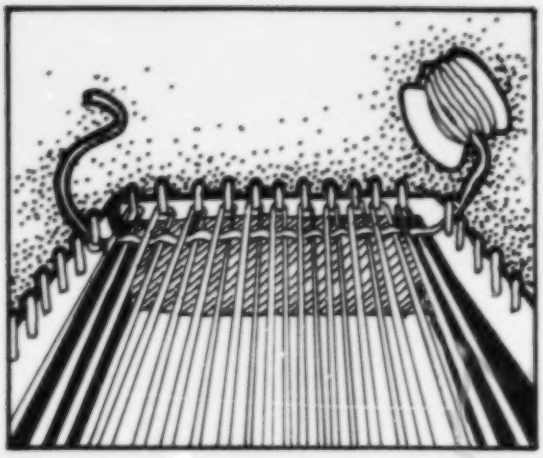


STEP 9 – Wind the yarn lengthwise in the dips around and around the shuttle.

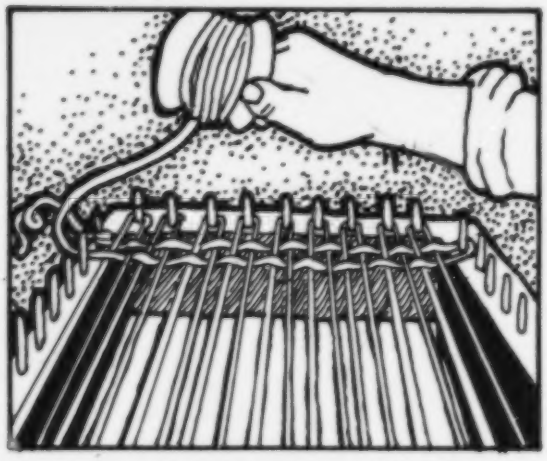
STEP 10 – Continue winding until all the yarn is wound onto the shuttle.



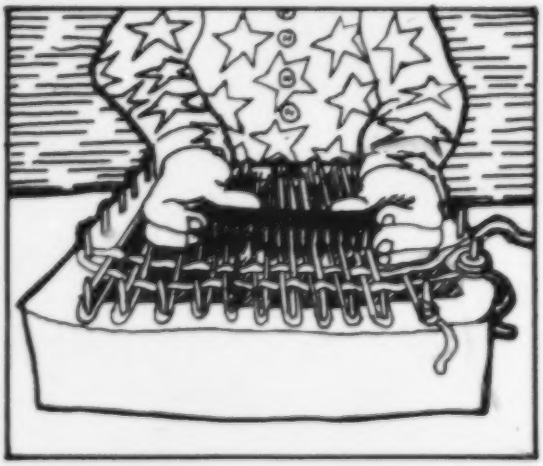
STEP 11 – Start weaving by unwinding a short length of yarn, push the shuttle under the first warp and over the second warp; again, leave a tail when you start weaving.



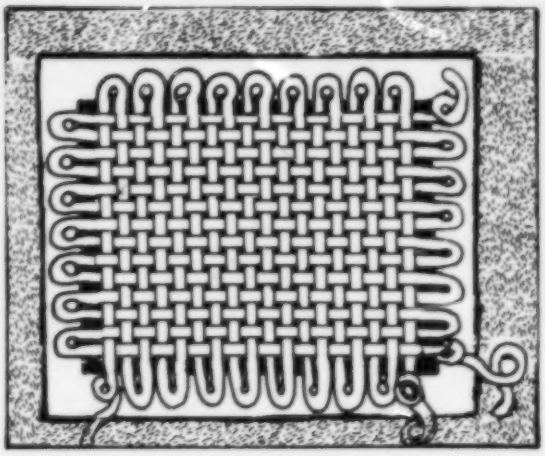
STEP 12 – Use the shuttle to pull the filling yarns over and under to the end of the warp cords.



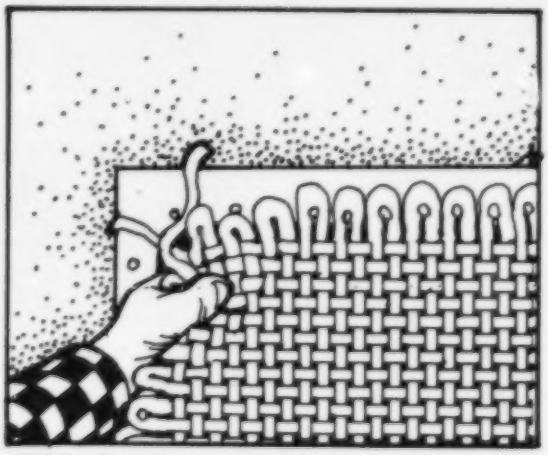
STEP 13 – Repeat in the opposite direction but this time go under where you went over before.



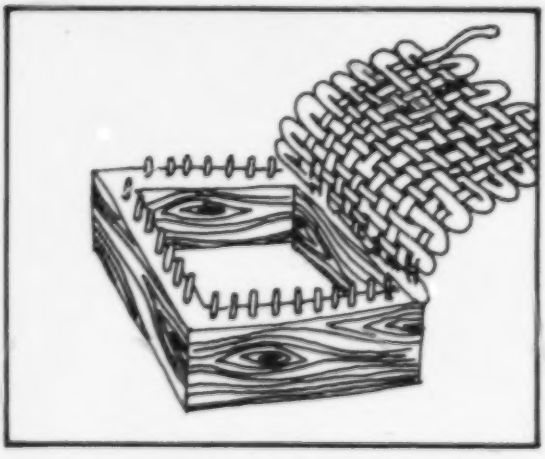
STEP 14 – Use the wide-tooth comb to push the fillings tightly against the previous row. This is called beating.



STEP 15 – Continue weaving and beating each row until you reach the bottom and your fabric is complete.



STEP 16 – Remove the fabric from the loom by firmly (but gently) sliding up one side off the nails.



STEP 17 – Repeat with the other sides.

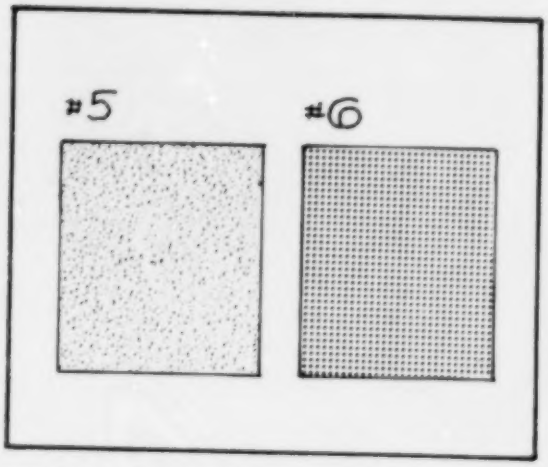
STEP 18 – Your fabric is now completed. If desired, you may use a needle to weave the loose tails of yarn into the fabric.

Check Point

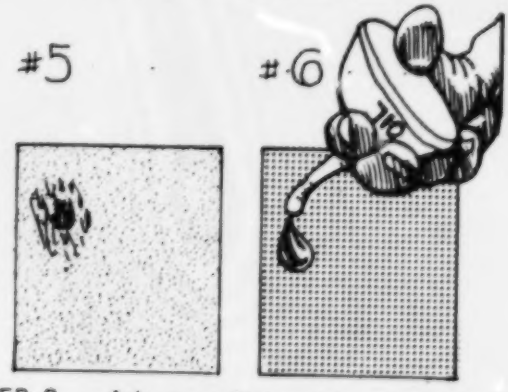
Take your fabric to your instructor to check. If it is satisfactory, go on to Objective IV. If it is not acceptable, return to step 1 and redo the objective and steps.

Instructional Objective IV

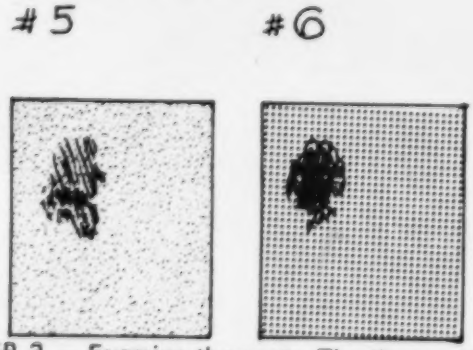
The student will identify samples of linen and cotton fabric using the oil test.



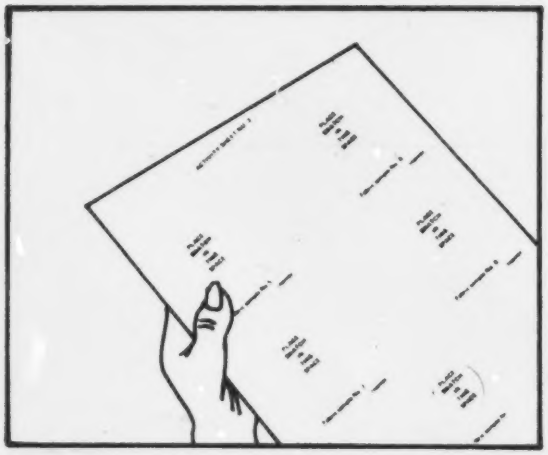
STEP 1 – Put fabric samples 5 and 6 on the table before you as shown in the picture.



STEP 2 – Ask your instructor to put one drop of oil on the fabric as shown.



STEP 3 – Examine the spots. The linen will appear translucent (clear). The cotton will appear opaque (not clear).



STEP 4 – Obtain Activity Sheet 3. Record in the space provided the identity of sample No.5 and sample No. 6 under oil test results.

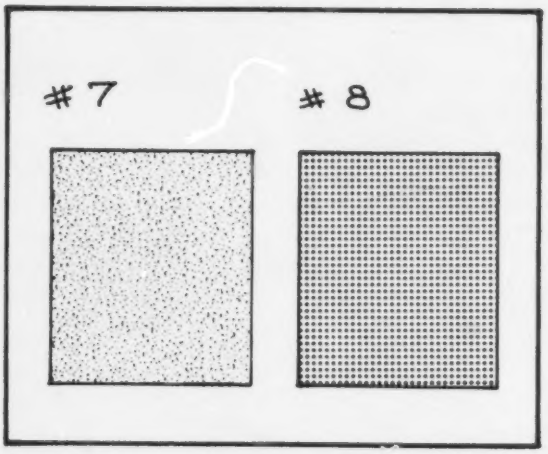
STEP 5 – Mount your samples in the space provided on Activity Sheet 3. Identify the sample by labeling the sample correctly either cotton or linen.

Check Point

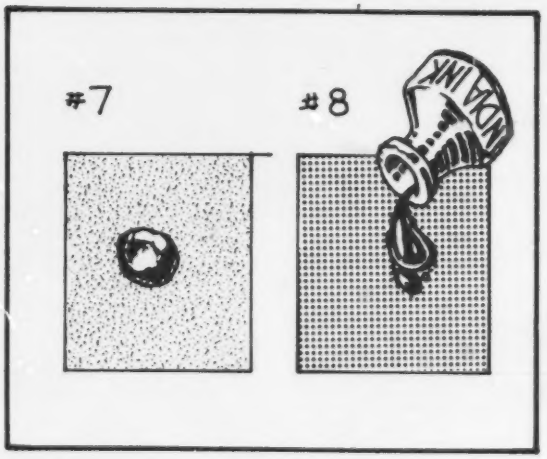
Your activity sheet will be checked after Instructional Objective VI.

Instructional Objective V

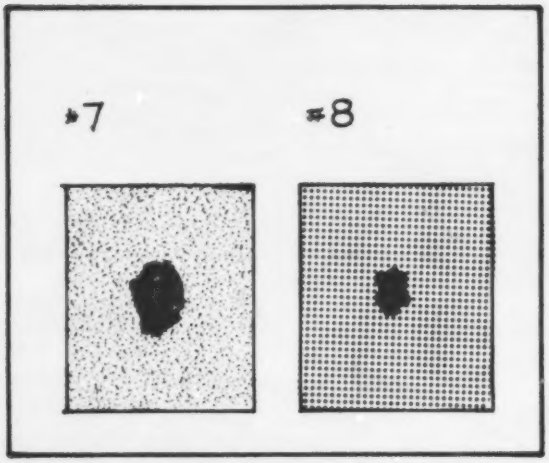
The student will identify fabric samples of linen and cotton using the ink test.



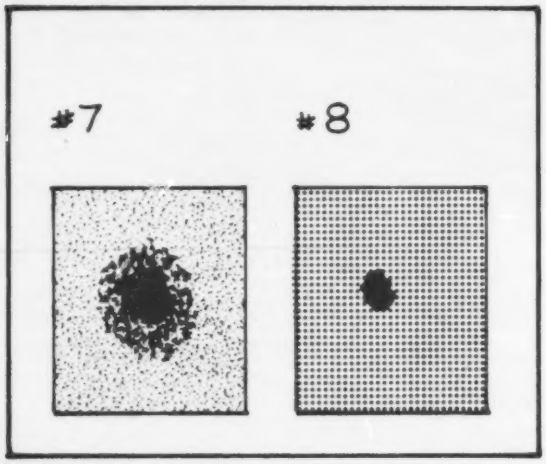
STEP 1 – Put fabric samples No. 7 and No. 8 on the table before you as shown.



STEP 2 – Ask your instructor to put one drop of ink on each fabric sample.

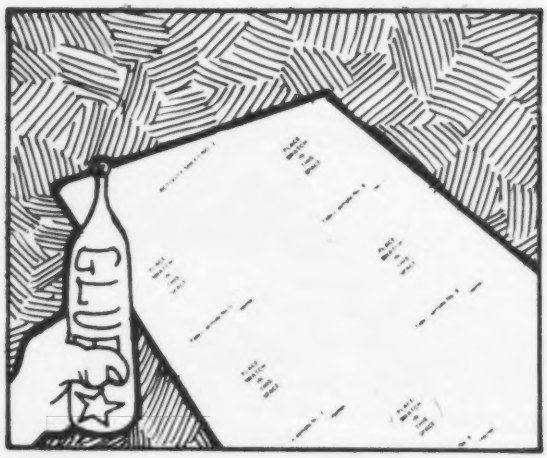


STEP 3 – Note the speed of absorption. The linen will absorb rapidly. The cotton will spread out into a larger spot.



STEP 4 – Examine the spots. The linen spot will be small and concentrated. The cotton spot will be a larger spot with a dark center and a light outer area.

STEP 5 – Decide which sample is linen and which is cotton. Record your decisions on Activity Sheet 3 in the space provided under ink test.



STEP 6 – Mount your samples in the space provided on Activity Sheet 3. Identify the samples by labeling the swatches correctly cotton or linen.

Check Point

Your activity sheet will be checked after Instructional Objective VI.

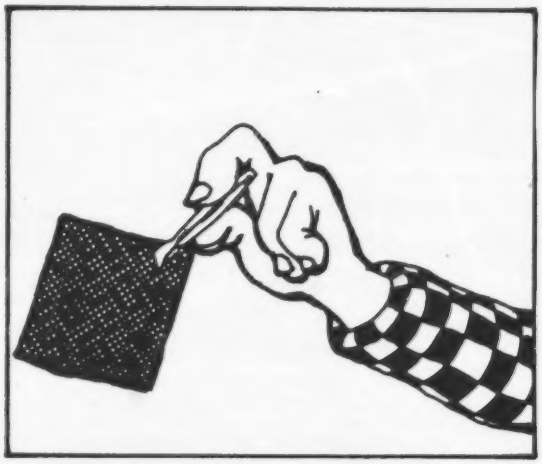
28

Instructional Objective VI

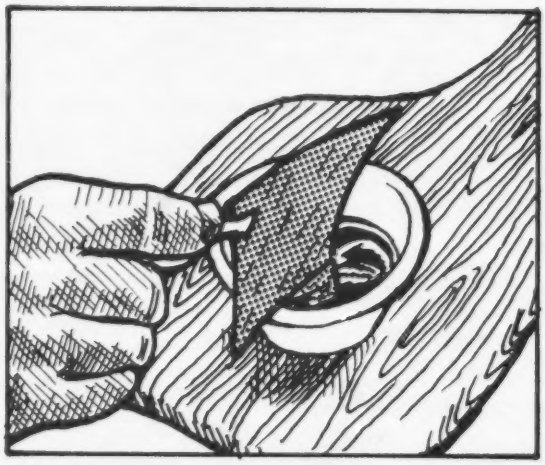
The student will identify an acetate fabric sample using the acetone test.

STEP 1 – Put fabric sample No. 9 on the table in front of you as shown.

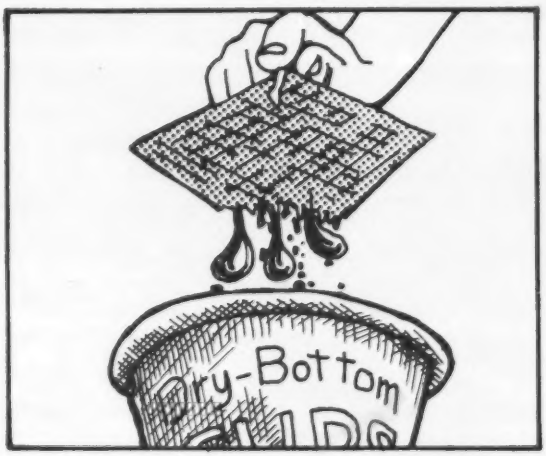
STEP 2 – From your instructor get a small cup of acetone.



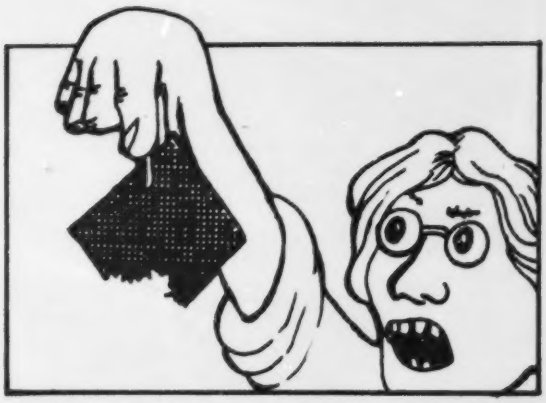
STEP 3 – Pick up fabric sample No. 9 with the tweezers as shown.



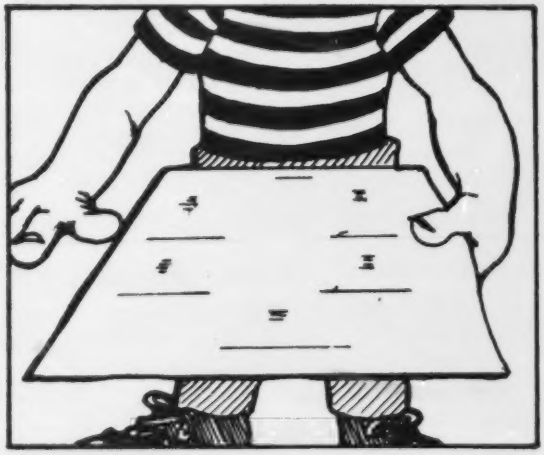
STEP 4 – Dip the corner of the fabric sample into the acetone in the cup.



STEP 5 – Hold the sample so it will drip over the cup.



STEP 6 – Examine the sample. Acetate fibers will harden and then dissolve. If the fabric is a combination of acetate and rayon, only the acetate will dissolve and the other fibers will remain intact.



STEP 7 – Mount your sample on Activity Sheet 3 in the place provided under acetone test. Identify the sample.

STEP 8 – Take the sample of acetone back to your instructor and remove ALL traces of it from your work station. IT IS HIGHLY FLAMMABLE.

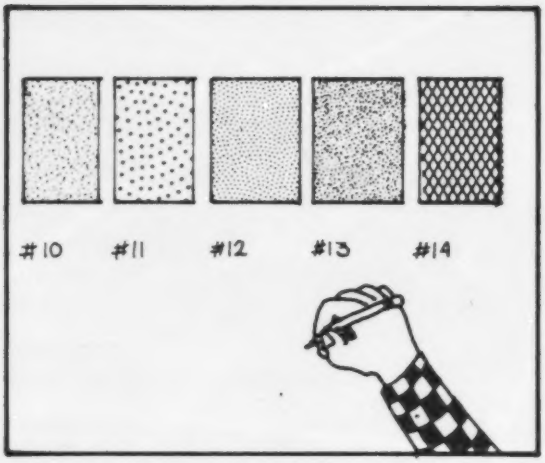
Check Point

Ask your instructor to see the master sheet to check your answers. If you have correctly identified all the samples, go on to Instructional Objective VII. If you missed any of the samples, redo the objective and steps for that sample.

30

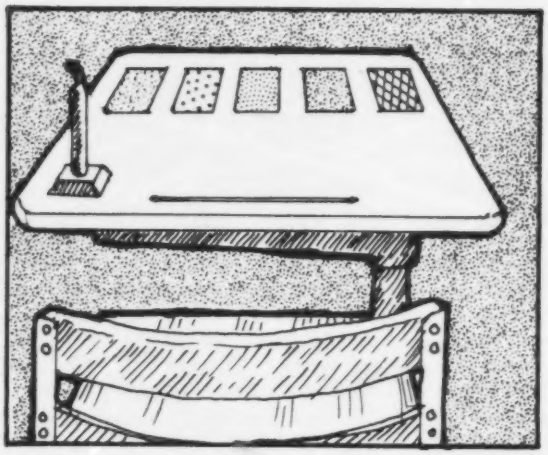
Instructional Objective VII

The student will identify fabric samples of cotton, wool, nylon, polyester, and fiberglass using the burn test.

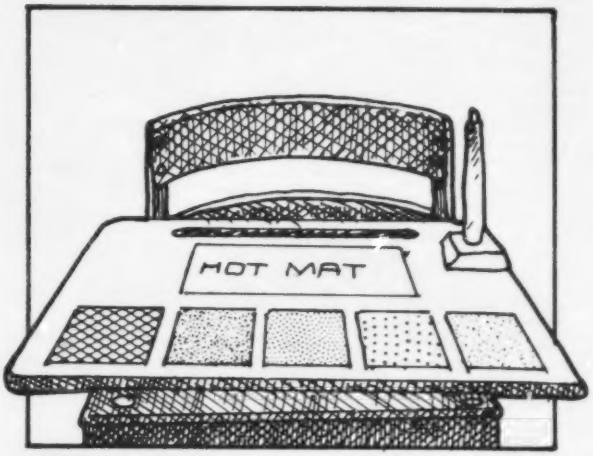


STEP 1 – Set out samples No. 10, 11, 12, 13, and 14 as shown.

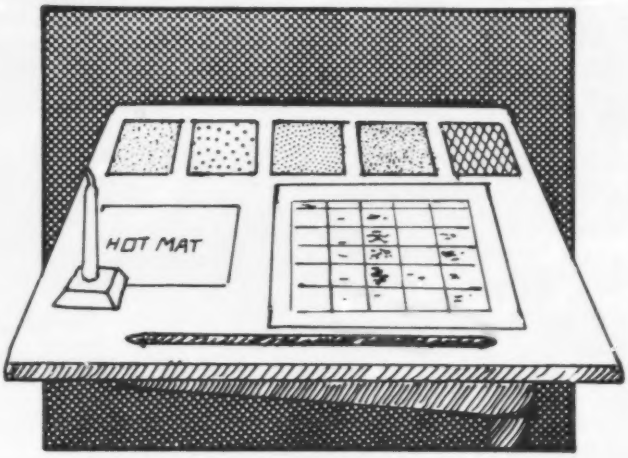
STEP 2 – Place the candle in the candle holder.



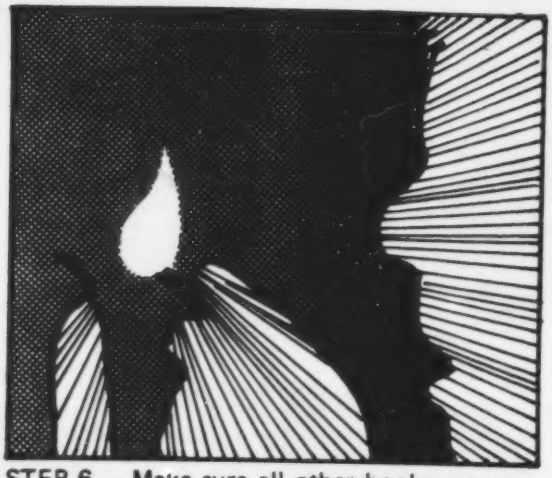
STEP 3 – Set the candle in the holder to the left of the swatches.



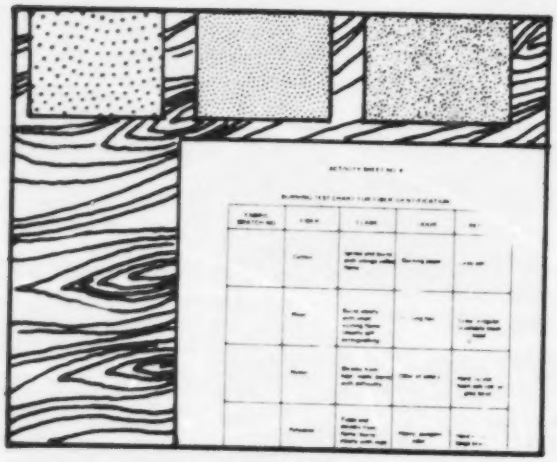
STEP 4 – Place the hot mat below the fabric samples and to the right of the candle as shown.



STEP 5 – Place Activity Sheet 4 to the right of the hot pad as shown.

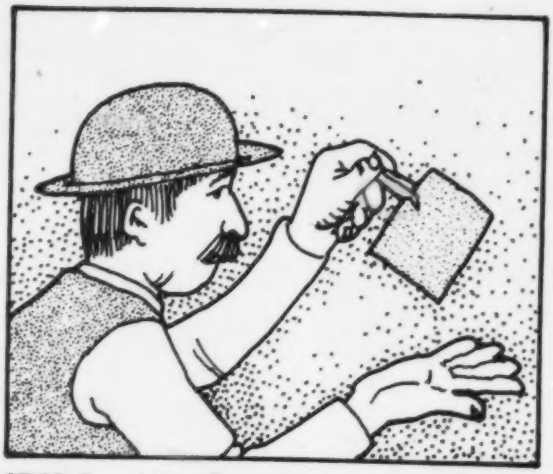


STEP 6 – Make sure all other books, papers, coats, etc., are cleared away. Ask the instructor to light the candle for you. DO NOT LIGHT THE CANDLE YOURSELF. The instructor will do a safety check before lighting the candle.



STEP 7 – Read Activity Sheet 4. Note that you will be looking for three results.

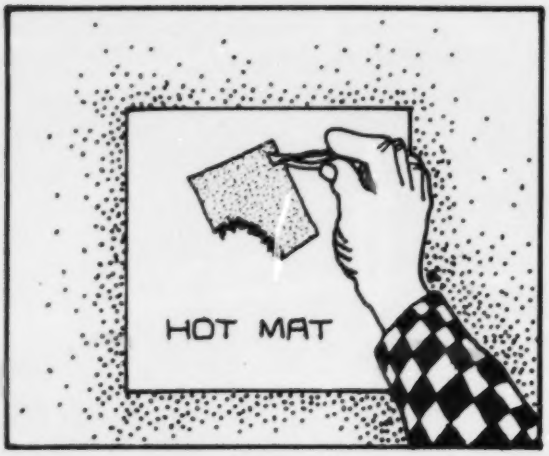
(1) Character of the flame and manner of burning.
(2) Odor resulting from burning.
(3) Quality and kind of residue



STEP 8 – With the tweezers, pick up fabric sample No. 10 in the manner shown.

STEP 9 – Touch the flame of the candle with the corner of the sample.

STEP 10 – Remove the sample as soon as the burning starts. Do not continue to hold the sample in the flame after it ignites.

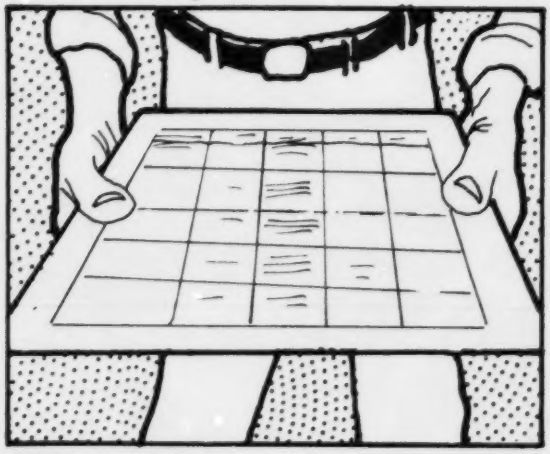


STEP 11 – Hold the sample over the hot mat to prevent any melted material from falling on the skin or garments. Observe the flame.

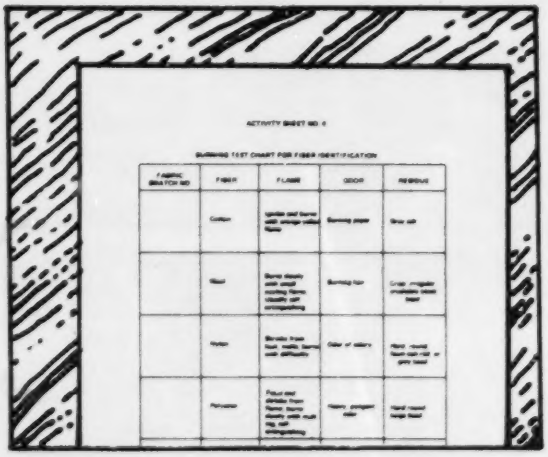
STEP 12 – Extinguish the flame quickly by blowing air onto the sample.

STEP 13 – Smell the sample and determine what odor was released.

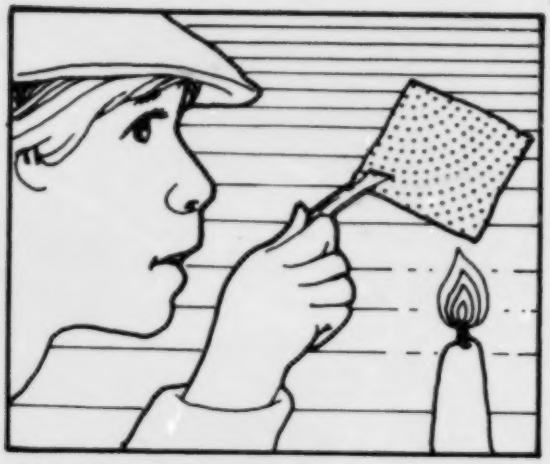
STEP 14 – Notice the kind of residue that is left after burning.



STEP 15 – Check the chart on Activity Sheet 4 to find the set of results that most closely resembled your results.



STEP 16 – Record the number of the fabric swatch in the column that states results similar to yours.



STEP 17 – Repeat steps 8 through 16 for the fabric samples 11, 12, 13, and 14.

STEP 18 – Blow out the candle.

Check Point

Ask your instructor for Checkpoint 3. When all of the samples have completely cooled, mount them on Checkpoint 3 handout sheet in the correct space. Ask your instructor for the master to check your work. If it is incorrect, redo the steps in the objective for the incorrect samples.

SALESPERSON (ret. tr.; whole. tr.)

Sells merchandise to individuals in store or showroom, utilizing knowledge of products sold: Greets customer on sales floor and ascertains make, type, and quality of merchandise desired. Displays merchandise, suggests selections that meet customer's needs, and emphasizes selling points of article, such as quality and utility. Prepares sales slip or sales contract. Receives payment or obtains credit authorization. Places new merchandise on display. May wrap merchandise for customer. May take inventory of stock. May requisiton merchandise from stockroom. May visit customer's home by appointment to sell merchandise on shop-at-home basis. Classifications are made according to products sold as SALESPERSON, AUTOMOBILE ACCESSORIES (ret. tr.; whole. tr.); SALESPERSON, BOOKS (ret. tr.); SALESPERSON, SURGICAL APPLIANCES (ret. tr.).

162.157-018 BUYER (profess. & kin.) broker.

Purchases merchandise or commodities for resale: Inspects and grades or appraises agricultural commodities, durable goods, apparel, furniture, livestock, or other merchandise offered for sale to determine value and yield. Selects and orders merchandise from showings by manufacturing representatives, growers, or other sellers, or purchases on open market for cash, basing selection on nature of clientele, or demand for specific commodity, merchandise, or other property, utilizing knowledge of various articles of commerce and experience as buyer. Transports purchases or contacts carriers to arrange transportation of purchases. Authorizes payment of invoices or return of merchandise. May negotiate contracts for severance of agricultural or forestry products from land. May conduct staff meeting with sales personnel to introduce new merchandise. May price items for resale. May be required to be licensed by state. May be identified according to type of commodities, merchandise, or goods purchased.

142.061-018 CLOTHES DESIGNER (profess. & kin.) fashion designer.

Designs men's, women's, and children's garments, shoes, and handbags: Analyzes trends and predictions, confers with sales and management executives, compares leather, fabrics, and other apparel materials, and integrates findings with personal interests, tastes, and knowledge of design to create new apparel designs. Sketches rough and detailed drawings of apparel and writes specifications describing factors, such as color scheme, construction, and type of material to be used. Confers with and coordinates activities of workers who draw and cut patterns and construct garments to fabricate sample garment. Examines sample garment on and off model and modifies or alters design as necessary to achieve desired effect. May draw garment or shoe pattern, using measuring and drawing instruments. May cut pattern. May construct sample, using standard sewing equipment. May arrange for showing of sample garments at sales meetings or fashion shows. May attend fashion and fabric shows to observe new fashions and materials. May be identified according to specific group designed for men, women, or children; and areas of specialization, such as sportswear, coats, dresses, suits, lingerie, or swimwear. May design custom garments for clients and be designated CUSTOM GARMENT DESIGNER (ret. tr.) May conduct research and design authentic period, country, or social class costumes to be worn by motion picture, television, concert, stage, and other media performers and be designated COSTUME DESIGNER (profess. & kin.). Workers who perform similar duties to design, copy, or modify clothing accessories are designated according to article designed such as HANDBAG DESIGNER (leather prod.); HAT DESIGNER (hat & cap); and SHOE DESIGNER (boot & shoe).